

collection of the Lynn Natural History Society. As there is no other record of this bird for the State, and as I was unable to find this specimen in a recent examination of the battered remains of this collection, I have omitted the bird from the list."

This Kentucky Warbler at Wellesley Hills would seem, therefore, to be the first authentic record of the species within the State.

In 'A Review of the Birds of Connecticut' by Mr. C. Hart Merriam, 1877, two records of Kentucky Warbler within that State are given, namely: "Mr. Erwin I. Shores obtained a male of this species at Suffield, Conn., Aug. 16, 1876, thus adding another bird, not only to the Avifauna of Connecticut, but also to New England"; and "I learn from Mr. J. G. Ely of Lyme, Conn., that he has shot one Kentucky Warbler." Dr. Jonathan Dwight, Jr., in 'The Auk,' Vol. XX, October, 1903, under the heading, 'Some New Records for Nova Scotia,' based on a small lot of bird skins sent to him from Sable Island by Mr. Jas. McL. Boutcher, furnishes this note on Kentucky Warbler: "A young male taken September 1, 1902, is in first winter plumage as determined by softening the skin and examining the bones. The nearest point at which the species regularly breeds is New Jersey."—HORACE W. WRIGHT, *Boston, Mass.*

Many Eyes are Better than One Pair.—Ornithologists from all over the United States and Canada are sending each year to the Bureau of Biological Survey their observations on the arrival of the birds. Some of these reports are merely incidental notes taken while performing the daily routine tasks; others represent a large amount of time and frequent special trips taken to fields and woods. The question continually arises, How nearly do the better grade of these reports represent the actual date of the earliest arrivals? If more time was spent in the fields by the observer, or if several persons worked carefully and completely a limited locality, how much earlier would be the dates of arrival? To find an answer to these questions was the problem before me the past spring. I began my excursions with the opening of the season, and as spring advanced, my trips became more frequent until during the three weeks of the height of migration they were almost daily. They were extended in all directions around Washington and were planned to cover the various kinds of country. As a result I saw more different species of birds than during any previous spring, including several of the rarest birds of this region.

The Audubon Society of the District of Columbia is in a flourishing condition. It holds several field meetings each year; the members have had access to a good selection of skins of local species and many of the members have become well acquainted with the avifauna of the District. In addition to the regular field days of the Society, this spring several of the more expert bird observers made many extra trips into the woods, and some of the most enthusiastic spent a large part of their time in hunting for new arrivals. These all reported to me the new birds they saw

from day to day, and I also received the notes collected by the various members of the Biological Survey and the National Museum in their excursions around the city. Many of the notes were duplicates or of no value, but after all these had been eliminated it was found that usable records had been received from twenty-three persons. The question then is how much additional did the twenty-three pairs of eyes observe that had not been noted by me. The following is a condensed answer.

Seen by others and not by me	4 species
Seen by me and not reported by others	3 "
Seen by others before I saw them	44 "
Seen by me before reported by others	25 "
Seen by both on the same day	7 "
	—
Total	83 species

The comparison applies only to the migrant land birds, as the facilities for observing water birds in the district are too limited to make the records of any value.

When using migration records for the calculation of average dates of arrival, I usually discard dates that are more than six days later than the probable normal date of arrival. When this test is applied to the notes the following results are obtained

Seen by others within six days of normal, but not by me	12 species
Seen by me within six days of normal but not reported by others	11 "
Seen by both within six days of normal	46 "
Reported by no one within six days of normal	14 "
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Total,	83 species

This last item of fourteen species not recorded within six days of normal is probably higher than would be obtained during most years. The month of April, 1907, in Washington was the coldest for thirty-five years, and many species were retarded in their movements. As the record stands in this unfavorable season I obtained usable notes on 71 per cent. of the species seen, while by adding the notes of the other observers, this is raised to 84 per cent. Of the 79 species seen by me, 57 were noted within six days of the normal time of arrival, which number is raised to 69 species on the addition of the remainder of the records.

The most interesting part of the investigation is the question of how much earlier twenty-four pairs of eyes can see birds than one pair. In spite of all my efforts, the larger amount of time spent in the field and the great variety of country covered, more than half the species were reported to me by others before I had noted their arrival.

Yet I saw them soon afterward and the 25 species that I saw first are a partial offset. The net result is that the combined notes average 1.3 days earlier than my notes alone. Hence, judging by the results of this single

year's trial, the dates of arrival obtained by a single person are on the average a little more than a day later than the time the birds actually did arrive.—WELLS W. COOKE, *Biological Survey, Washington, D. C.*

Some Interesting Records from southern Missouri.—*Helminthophila bachmani*. BACHMAN'S WARBLER.—I was fortunate enough to find this interesting warbler on two different occasions, the first on May 2, 1907, in the northwestern part of Shannon County, and the second on May 23, 1907, in Carter County, near Grandin. Both of these records were surprising considering the character of the country, for these counties lie on the southeastern slope of the Ozark Mountains, a dry rocky region of limestone formation covered with a forest of oak and yellow pine (*Pinus echinata*), and not at all like the swampy cypress swamps of Dunklin County in the Missouri Peninsula where Mr. O. Widmann found them in 1897 (Auk, XIV, p. 305).

***Helminthophila leucobronchialis*.** BREWSTER'S WARBLER.—On May 12th, 1907, in Shannon County, Mo., my attention was attracted by a warbler song which I did not recognize. I soon discovered the bird and on securing it found it to be an absolutely typical specimen of Brewster's Warbler (No. 1531, ♂, Coll. L. B. & E. S. Woodruff). The entire under parts are pure white without even a suggestion of any yellow wash. The entire back and neck, from crown down, bluish gray with only a few feathers in the middle of the back slightly tipped with greenish, not nearly so much as usually found in *H. chrysoptera*. On the wings is a single broad patch of canary yellow. In fact this specimen, except for the absence of the black throat and cheek patch, would be a typical *H. chrysoptera*, and the only similarity to *H. pinus* is the narrow black line through the eye. There is nothing about this specimen to substantiate the theory that Brewster's Warbler may be a color phase of *H. pinus*. The song, though similar in character to that of *H. pinus*, was much weaker and more varied.

This makes the first record for Missouri and for any State west of the Mississippi River.

***Helminthophila peregrina*.** TENNESSEE WARBLER.—On May 2, 1907, I secured a male Tennessee Warbler in Shannon County, Mo., which had a number of coppery chestnut feathers in its crown, similar to those of a Nashville Warbler. In all other respects it was a typical Tennessee Warbler. (No. 1500, ♂, Coll. of L. B. & E. S. Woodruff.)

***Dendroica vigosii*.** PINE WARBLER.—This warbler has not been heretofore recorded as breeding in Missouri but I found it common in the pine woods of both Shannon and Carter Counties from March 8 till I left on June 8. Though I found no nests, I saw the birds gathering nesting material and carrying it up into pines in the latter part of March, and on April 25, I secured a nestling too young to fly which had fallen from its nest and was being fed on the ground by its parents. I also found a number of full grown young birds in the first plumage before the middle of May.